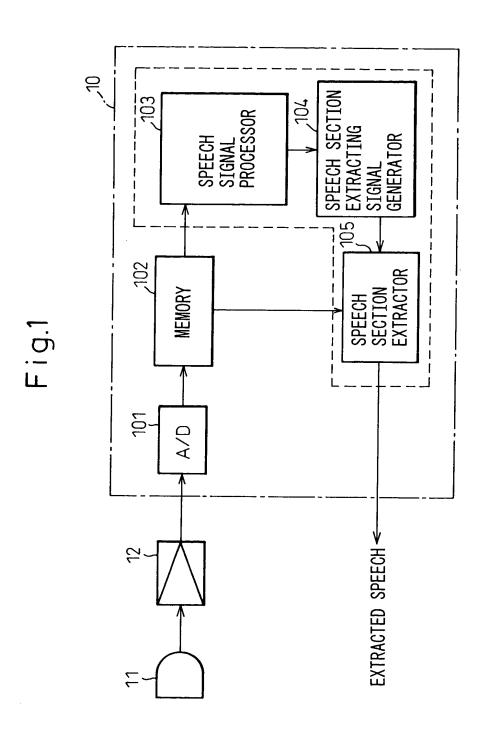
D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

Sheet <u>1</u> of <u>23</u>





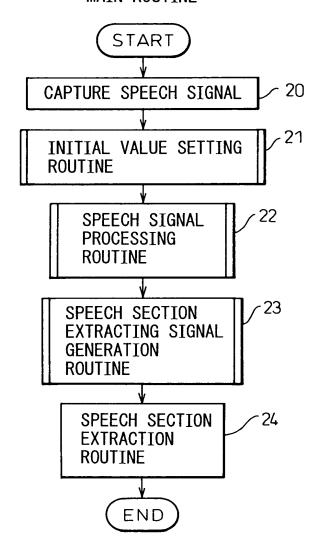
D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

Sheet 2 of 23

 $\frac{2}{23}$

Fig.2

MAIN ROUTINE



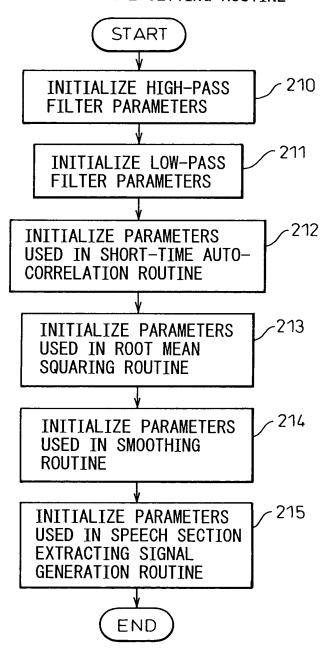
D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al.
SPEECH SECTION DETECTION

APPARATUS

Sheet <u>3</u> of <u>23</u>

Fig.3

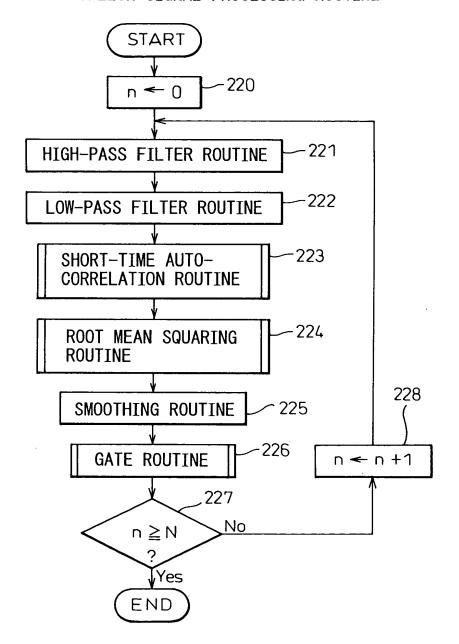
INITIAL VALUE SETTING ROUTINE



D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

Sheet 4 of 23

Fig.4
SPEECH SIGNAL PROCESSING ROUTINE

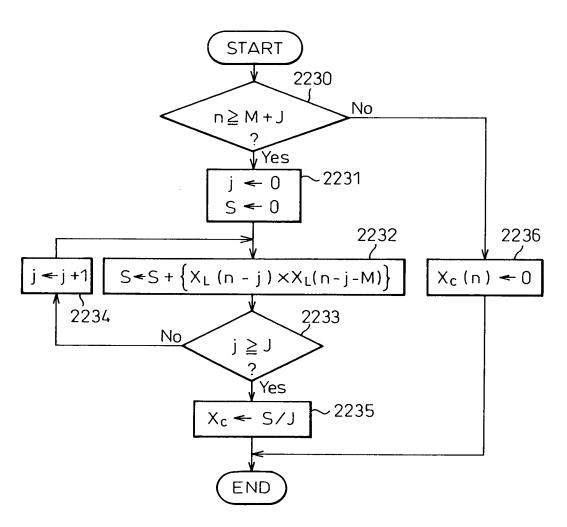


D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

Sheet <u>5</u> of <u>23</u>

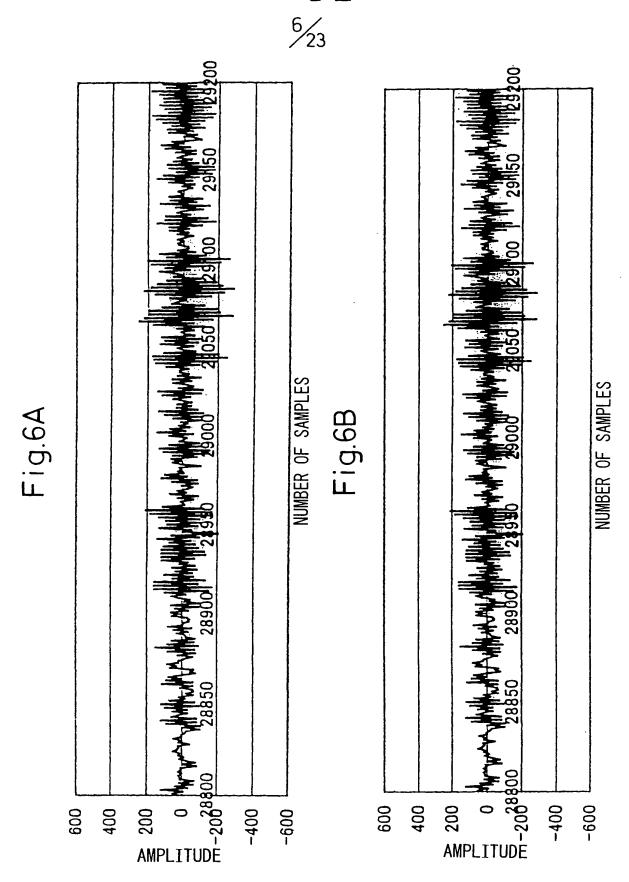
 $\frac{5}{23}$

Fig.5
SHORT-TIME AUTO-CORRELATION ROUTINE



D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

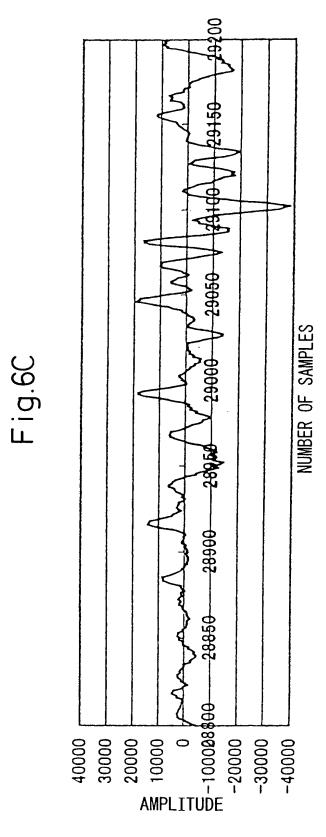
Sheet <u>6</u> of <u>23</u>



D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

Sheet <u>7</u> of <u>23</u>



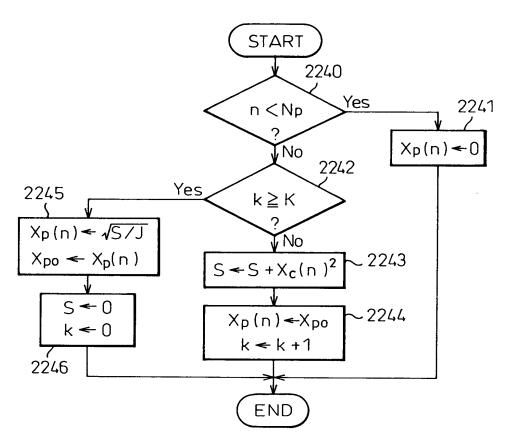


D. Bruce Prout 50710/DBP/A400

Sheet <u>8</u> of <u>23</u>

Hideki Kitao, et al.
SPEECH SECTION DETECTION
APPARATUS

Fig.7 ROOT MEAN SQUARING ROUTINE



D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

Sheet <u>9</u> of <u>23</u>

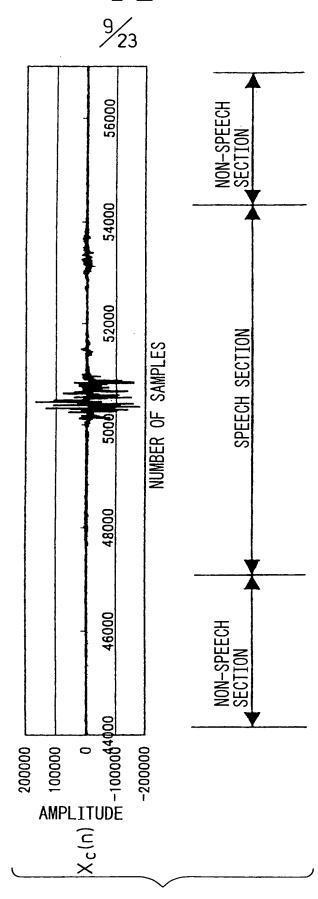


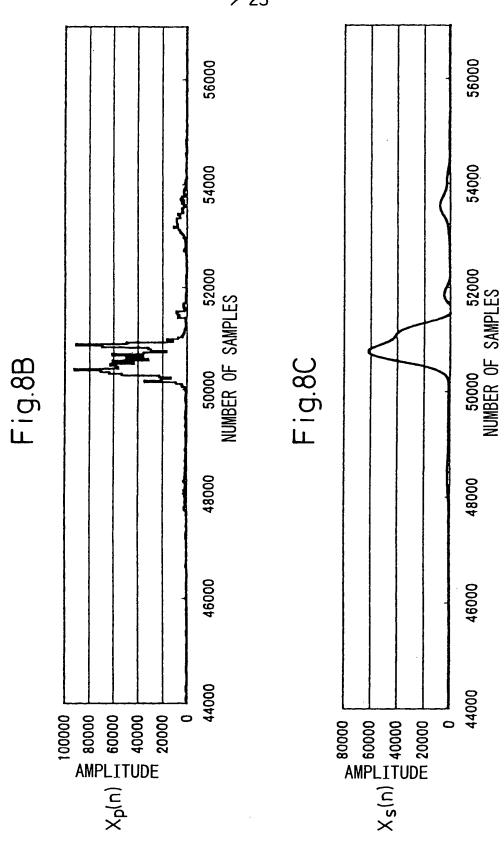
Fig.8A

D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al

Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

Sheet <u>10</u> of <u>23</u>





D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

Sheet 11 of 23

11/23

Fig.9

GATE ROUTINE

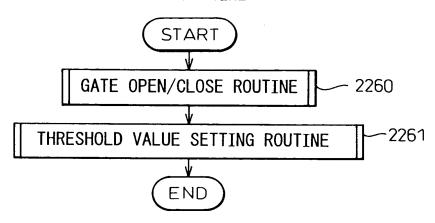
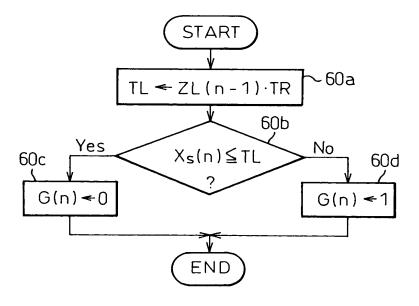


Fig.10

GATE OPEN/CLOSE ROUTINE



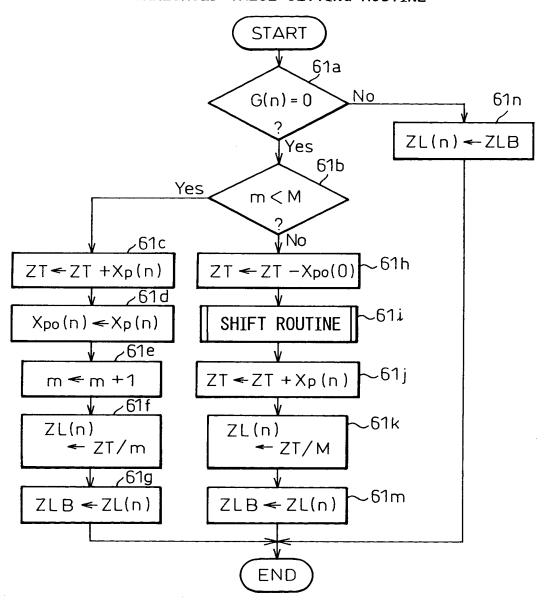
D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

Sheet 12 of 23

12/23

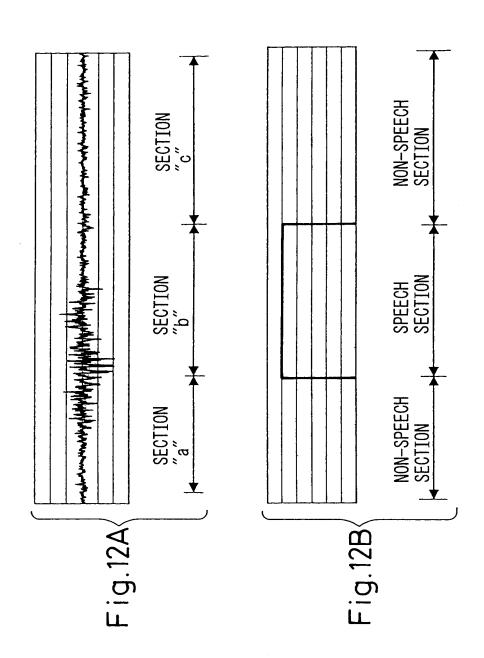
Fig.11

THRESHOLD VALUE SETTING ROUTINE



D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

Sheet <u>13</u> of <u>23</u>



D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

Sheet 14 of 23

14/23

Fig.13

SHIFT ROUTINE

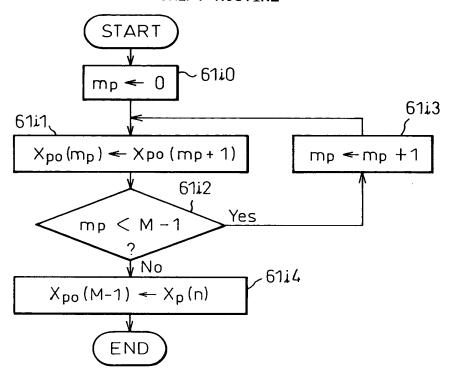
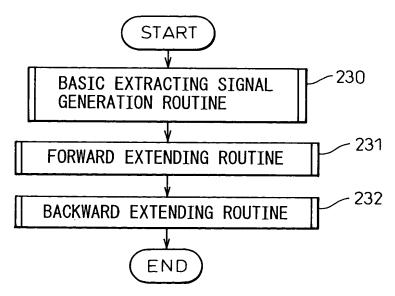


Fig.14

SPEECH SECTION EXTRACTING SIGNAL GENERATION ROUTINE



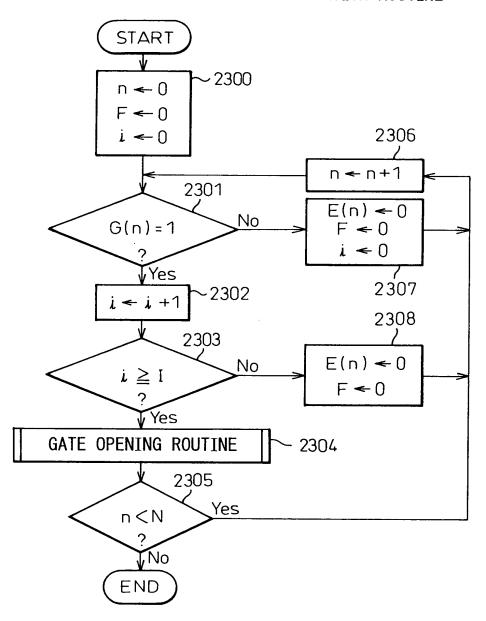
Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

Sheet <u>15</u> of <u>23</u>

D. Bruce Prout

50710/DBP/A400

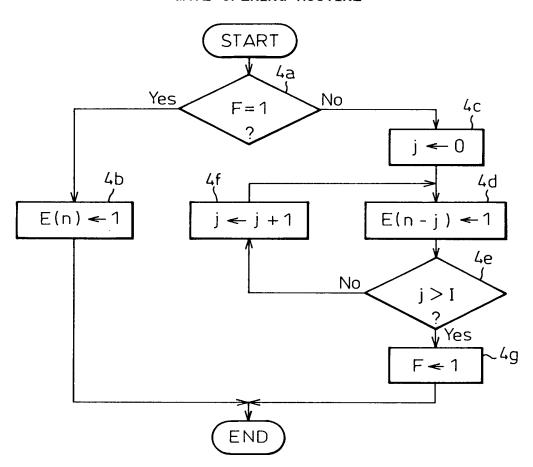
Fig.15
BASIC EXTRACTING SIGNAL GENERATION ROUTINE



D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

Sheet <u>16</u> of <u>23</u>

Fig.16
GATE OPENING ROUTINE

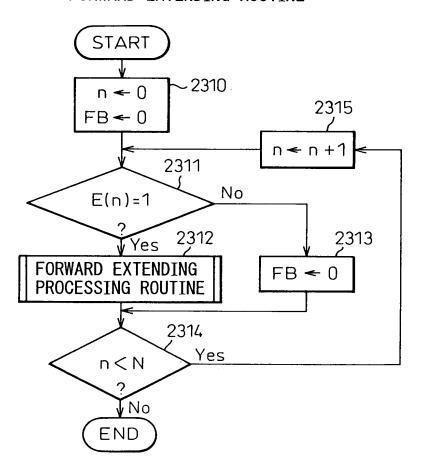


D. Bruce Prout 50710/DBP/A400 Attorney: Docket No.: Inventor(s):

Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS Title:

Sheet <u>17</u> of <u>23</u>

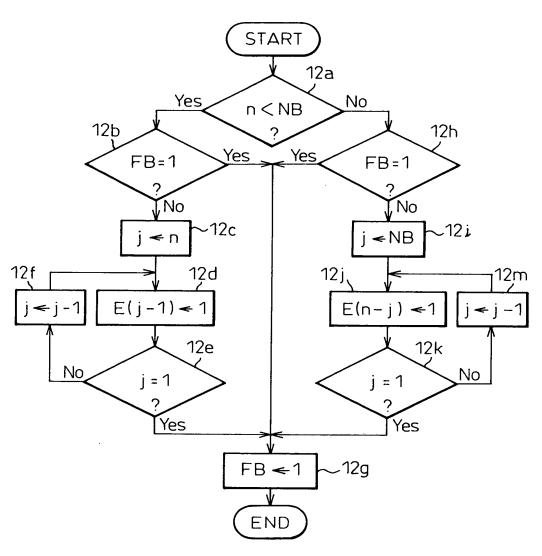
Fig.17 FORWARD EXTENDING ROUTINE



D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

Sheet <u>18</u> of <u>23</u>

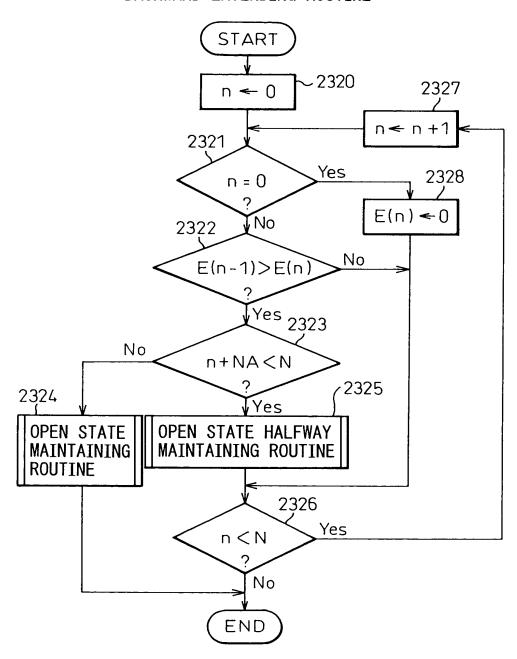
Fig.18
FORWARD EXTENDING PROCESSING ROUTINE



D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

Sheet 19 of 23

Fig.19
BACKWARD EXTENDING ROUTINE



D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

Sheet <u>20</u> of <u>23</u>



Fig.20

OPEN STATE MAINTAINING ROUTINE

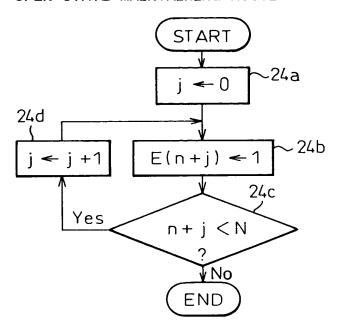
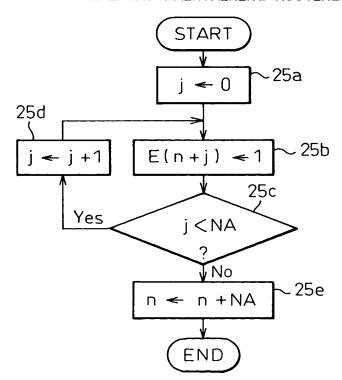


Fig. 21
OPEN STATE HALFWAY MAINTAINING ROUTINE



Attorney: Docket No.: Inventor(s): D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS Sheet <u>21</u> of <u>23</u> 21/23 61000 61000 ದ 56000 56000 46000 51000 NUMBER OF SAMPLES 000 S1000 NUMBER OF SAMPLES Fig.22B Fig.22A 46000 41000 41000

36000

GATE SIGNAL

36000

- 8: 9: 7: 0 GATE SIGNAL

D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

Sheet 22 of 23

Fig.23A

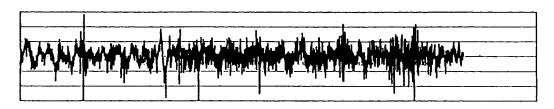


Fig.23B

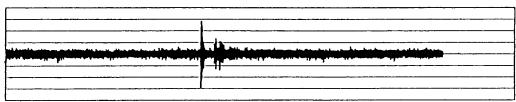


Fig.23C

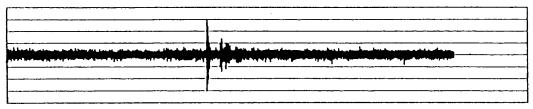
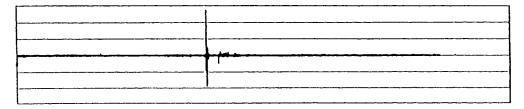


Fig.23D



D. Bruce Prout 50710/DBP/A400 Hideki Kitao, et al. SPEECH SECTION DETECTION APPARATUS

23/23

Sheet <u>23</u> of <u>23</u>

Fig.23E

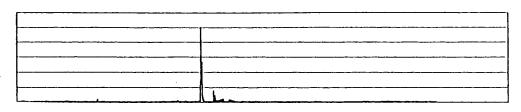


Fig.23F

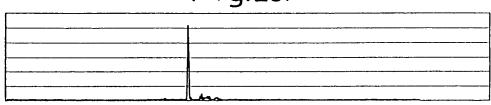


Fig.23G

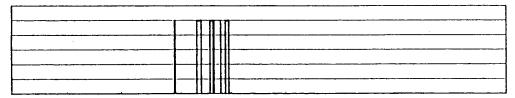


Fig.23H

